

Al Weverstad Executive Director -- Environment & Energy, GM Public Policy Center Chairman -- California Fuel Cell Partnership

GM H2 Overview

- Research Findings
- Goals
- Partnerships
- Investment
- -H2 Roadmap

GM H2 Overview

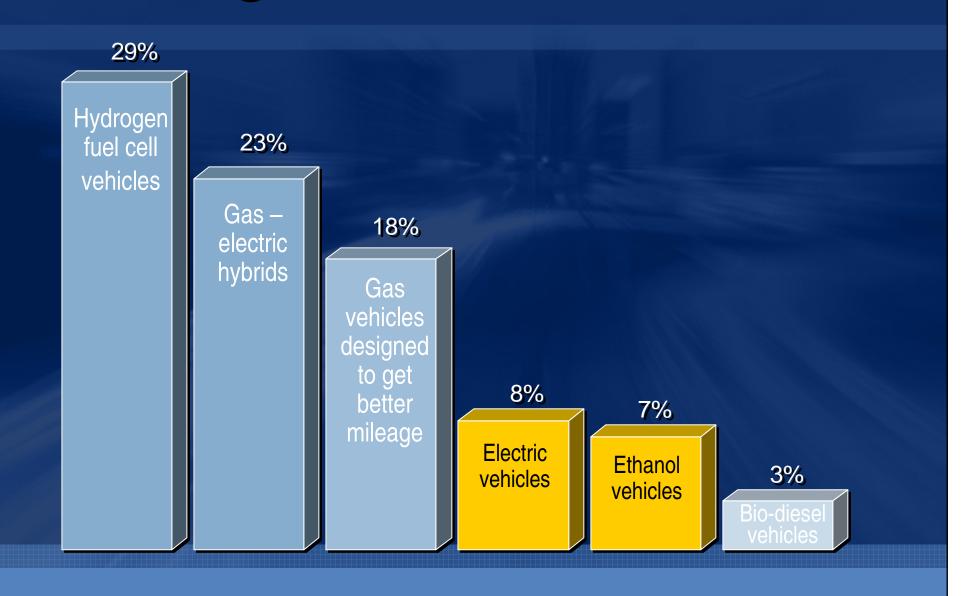
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Peter Hart Research Associates Survey

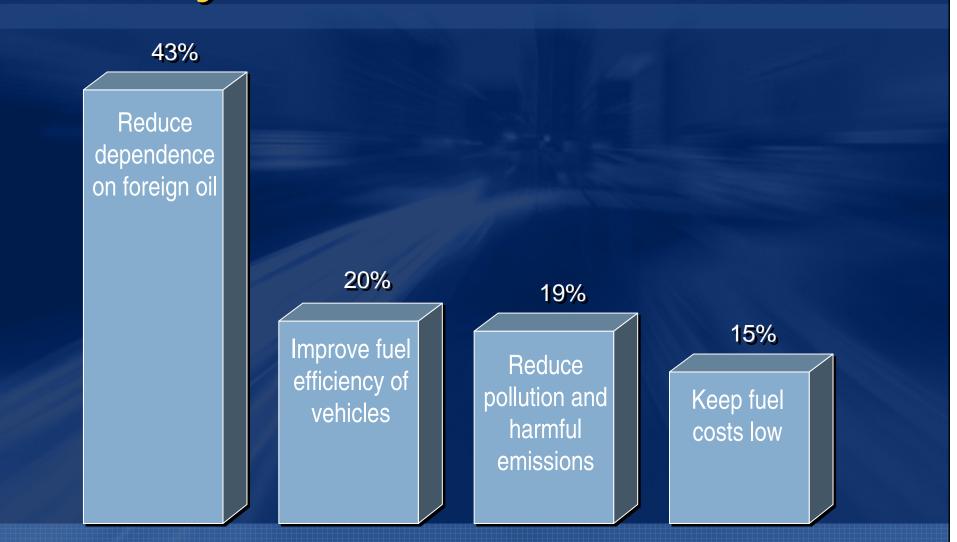
On behalf of GM, Peter D. Hart Research Associates conducted a nationwide telephone survey that explored Americans' attitudes toward U.S. energy policy and emerging automotive technologies:

- 1,004 adults
- Conducted June 17-20, 2005
- Has an overall margin of error of +3.1%.

Best Long-Term Solution



Top Priorities For U.S. Energy Policy



Reasons For New Automotive Technology

49%

Dependence
on foreign oil
Country will
be more
secure if we
control our
energy
resources

29%

Environment

Must find

ways to

reduce

polluting

emissions/
greenhouse

gases

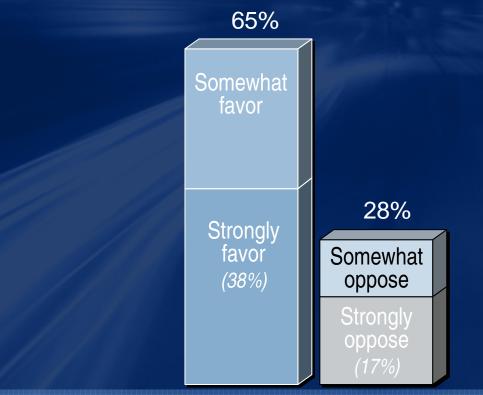
17%

Economy

Must develop
cheaper
alternatives to
keep driving
affordable

Government Commitment To Gas-To-Hydrogen Transformation

Support for U.S. government making a funding commitment to transform the auto industry into a hydrogen-based system



36% favor, 55% oppose increasing the gas tax to fund the effort.

Survey Summary

- Hydrogen fuel cell vehicles hold the most promise
- Broad support for continued partnership between government and industry

GM's Goal

To develop hydrogen fuel cell vehicles that will ultimately remove the automobile – and transportation in general – from the environmental debate.



GM Research Partners

- Hydrogen storage advances with two key research partners:
 - -Sandia National Laboratory in Livermore
 - -Hughes Research Laboratories in Malibu

GM's Investment in Hydrogen

- General Motors and U.S. Department of Energy have signed a five-year, \$88-million agreement to build a 40vehicle fuel cell fleet and further develop the technology.
- GM will spend \$44 million to deploy fuel cell vehicle demonstration fleets in California, Washington, New York, and Michigan.

 600 people working on fuel cell technology around the world, including at GM's Advanced Technology Center in Torrance

GM Partners for Hydrogen

- Shell Hydrogen
- Quantum Technologies Irvine, CA
- U.S. Department of Defense

Military Fuel Cell Silverado



California Collaboration

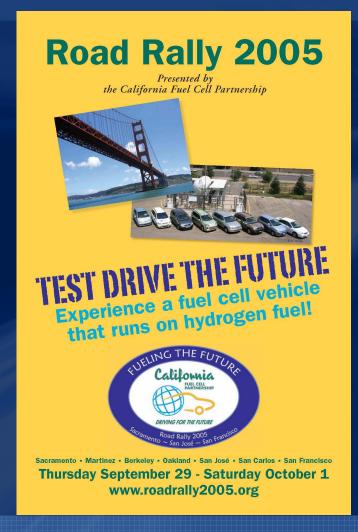


California Fuel Cell Partnership

www.roadrally2005.org

CA H2 Highway Network

CaFCP Road Rally



"Fueling the Future"

Sacramento, Martinez, Berkeley, Oakland, San Jose, San Carlos, San Francisco

Sept. 29 to Oct. 1

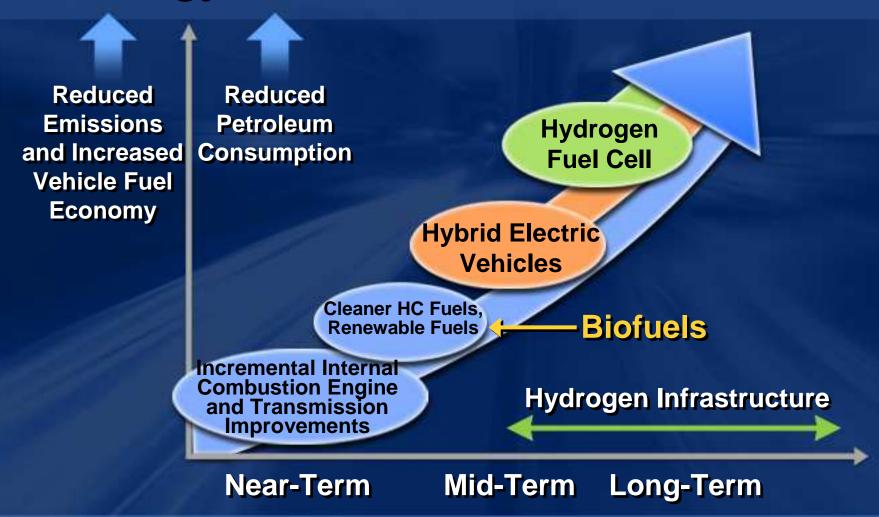
www.roadrally2005.org

GM's Hydrogen Roadmap

By 2010 GM will design and validate a fuel cell propulsion system that is:

- Competitive with current internal combustion engines in terms of performance and durability
- Can be built affordably in high volume

Advanced Propulsion Technology Strategy



Advanced Propulsion Technology Strategy

